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TITLE:

Direct backlight with improved luminance

INVENTOR: CHO, G S

PATENT-ASSIGNEE: KWANG WOON DISPLAY TECHNOLOGY CO LTD[KWANN]

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BASIC-ABSTRACT:

NOVELTY - A direct backlight with improved luminance is provided to form a diffusion plate thicker at an upper end part of a fluorescent lamp and thinner at both sides of the lamp, thereby minimizing the luminance at the upper end of the lamp for obtaining the uniformity in the luminance.

DETAILED DESCRIPTION - A direct backlight with improved luminance includes a reflection plate(20), a **light guide** panel(30), a diffusion plate(40), and diffusion **sheets**(50,52). The reflection plate has an upper part in a predetermined inclined structure(24) for inducing light from a fluorescent lamp to side surfaces. The **light guide** panel is provided on the reflection plate and has a lower part in a predetermined inclined structure for inducing the **light** from the fluorescent lamp to side surfaces. The **light guide** panel has an upper part formed with **grooves**(38) by a uniform interval for securing the fluorescent lamp and protruded curve parts(36) at both ends of the **grooves**.

The diffusion plate is positioned on the <u>light guide</u> panel and mounted with the diffusion <u>sheets</u> which improve the uniformity in the luminance. The diffusion plate employs protrusion part(42) to be positioned on the securing <u>grooves</u> and depressed curve parts(44) corresponding to the protruded curve parts of the <u>light guide</u> panel.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: DIRECT IMPROVE LUMINOUS

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